ABSTRACT OF THE DISCLOSURE

The method for fabricating a semiconductor includes the steps of: (1) growing a first semiconductor layer made of $Al_xGa_{1-x}N$ ($0 \leqq x \leqq 1$) on a substrate at a temperature higher than room temperature; and (2) growing a second semiconductor layer made of $Al_uGa_vIn_wN$ ($0 < u \leqq 1$, $0 \leqq v \leqq 1$, $0 \leqq w \leqq 1$, $u+v+w=1$) over the first semiconductor layer. In the step (1), the mole fraction x of Al of the first semiconductor layer is set so that the lattice constant of the first semiconductor layer at room temperature substantially matches with the lattice constant of the second semiconductor layer in the bulk state after thermal shrinkage or thermal expansion.